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Stratasys 3D Printing Allows Automotive Manufacturer to Reduce Assembly Tool Production Costs by up to 90%

Opel uses Stratasys 3D printed manufacturing tools to attach production parts to its renowned 'Adam' car – including roof spoilers, glass roofs and the iconic lettering on the rear windows

Using its fleet of Stratasys FDM 3D Printers, the car manufacturer can 3D print assembly tools in less than 24 hours ready for use on the production line

MINNEAPOLIS & REHOVOT, Israel--(BUSINESS WIRE)-- Stratasys Ltd. (Nasdaq:SSYS), the 3D printing and additive manufacturing solutions company, today announced that automotive giant, Opel, is slashing manufacturing tool production costs by up to 90% using its Stratasys 3D Printers, as well as 3D printing assembly tools in less than 24 hours.

This Smart News Release features multimedia. View the full release here: http://www.businesswire.com/news/home/20151118005077/en/

Among the assembly tools 3D printed by Opel with its Stratasys FDM 3D Printers are those used to position the roof onto vehicles. Photo: Stratasys

Opel was the third-largest passenger car brand in the European Union in 2014, and together with Vauxhall, sold more than a million cars. With efficient production crucial to its success, Opel's International Technical Development Center is 3D printing a range of manufacturing and assembly tools to advance the production of its iconic 'Adam' hatchback car. These assembly tools are used to precisely attach different components to the car, such as the rocker molding and roof spoilers, align the iconic 'Adam' lettering on the rear-side window, as well as assemble the glass and retractable roofs.

"Besides the cut in tool production time and considerable cost reductions, customized tools are a third important benefit achieved with 3D printing. We are now able to produce more

complex shapes than we could via conventional manufacturing. This crucially allows us to adapt the tool to the worker and the specific car," says Sascha Holl, Virtual Simulation Engineer – Tool Design at Opel.

Since 3D printing its manufacturing tools, the company involves its assembly-line workers in the design process to improve efficiency. This allows operators to evaluate concepts, using their experience to highlight any potential issues before committing to the production of the final assembly tool for each specific car component. With Stratasys 3D printing, any required design iterations to the Opel manufacturing tools are easily accommodated in a matter of hours, eliminating costly iterations further along the production process.

"Cases like Opel emphasize the massive impact that low risk, high-reward 3D printed parts – such as manufacturing tools – can have on production efficiency," says Andy Middleton, President, Stratasys, EMEA. "The capability to produce such items on-demand at a reduced costs can significantly accelerate time-to-production and give businesses that competitive edge. Combine that with the ability to customize tools efficiently, as well as create complex geometries, and you can see why Opel is indicative of the way in which additive manufacturing is transforming our customer's production operations."

To learn more about how Opel is using Stratasys 3D printed manufacturing tools to enhance the production line, watch this video.

For more than 25 years, Stratasys Ltd. (NASDAQ:SSYS) has been a defining force and dominant player in 3D printing and additive manufacturing - shaping the way things are made. Headquartered in Minneapolis, Minnesota and Rehovot, Israel, the company empowers customers across a broad range of vertical markets by enabling new paradigms for design and manufacturing. The company's solutions provide customers with unmatched design freedom and manufacturing flexibility - reducing time-to-market and lowering development costs, while improving designs and communications. Stratasys subsidiaries include MakerBot and Solidscape and the Stratasys ecosystem includes 3D printers producing prototypes and parts; a wide range of 3D printing materials; parts on-demand via Stratasys Direct Manufacturing; strategic consulting and professional services; and Thingiverse/GrabCAD communities with 5+ million free design components, printable files. With 3,000 employees and 800 granted or pending additive manufacturing patents, Stratasys has received more than 30 technology and leadership awards. Visit us online at: www.stratasys.com or http://blog.stratasys.com.

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